

# National Water Quality Monitoring Council

Working together for clean water

## **Accessing Water Quality Data from the Water Quality Portal**

#### What is the Portal?

The national Water Quality Portal (Portal) combines physical, chemical and biological water quality data from multiple data sources at one location and serves the data out in one format. It provides a single, user friendly web interface to access more than 250 million water quality data records collected by over 400 federal, state and tribal agencies and other water partners. The data is served out in one format to increase the use for prospective users including scientists, policy-makers, and the public in their water data analyses.

The Portal is a cooperative service sponsored by the United States Geological Survey (USGS), the United States Environmental Protection Agency (EPA), and the National Water Quality Monitoring Council (NWQMC). The Portal integrates publicly available water-quality data from the EPA STOrage and RETrieval (STORET) Data Warehouse, the USGS National Water Information System (NWIS) and the United States Department of Agriculture (USDA) Sustaining the Earth's Watersheds Agricultural research Data System (STEWARDS) through the Water Quality eXchange (WQX).

#### How can I access data from the WQP?

The Portal was developed to reduce the burden when searching and downloading water quality data. Data can be downloaded in Excel, CSV, TSV and KML formats.

#### Step 1 Select a location

The Portal allows you to spatially locate data by *Place*, *Point Location*, or *Bounding Box*.

Place selection allows you to select data based on country, state and/or county associated with the desired dataset.

**Point Location** can be used to enter a latitude/ longitude point and a distance, (in miles), surrounding a point to find data near your desired location. Latitude/longitude coordinates can be found using mapping tools, for example Google

Maps has this feature. Also, you can click *Use my location* to find stations and data near you.

**Bounding Box** allows you to identify a square by entering latitude/longitude coordinates. This query will return all

stations or data within the spatial square you have defined.

#### Step 2 Define your site type

The Portal allows you to select the data types of interest, thereby limiting the amount of data the Portal will return. This is helpful for users who want to analyze certain characteristics in specific waterbody. The *Site Parameters* section allows you to select data by a Site Type, Organization ID, Site ID, and/or Hydrologic Unit Code (HUC).

**Site Type:** A site type is a description of the typed of location where the data was collected. (e.g. Estuary,

Start by going to <a href="http://www.waterqualitydata.us/">http://www.waterqualitydata.us/</a>

### Water Quality Portal

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Click here to get started

DOWNLOAD DATA

Download water-quality data in Excel, CSV, TSV, and KML formats.

HOW TO USE THE WQP
User Guide
Web Services Guide
FAQs
Upload Data

NATIONAL RESULTS COVERAGE
Water-quality data in your state.

ABOUT THE WQP
What is the WQP?

Point Location: ? Bounding E

Within North:

miles of South:

7 Lat:
Long:
Use my location

Point Location: ? Bounding E

West:
Use my location

Stream, Wetland, etc.)

Organization ID: An abbreviated ID for an Organization. You can also start typing an Org name to get the corresponding ID. (e.g. River Keeper)

**Site ID:** An Id for a location as defined by the collecting

SITE PARAMETERS

Site Type: All ?

Organization ID: All ?

Site ID: ?

HUC: ?

Other Water Quality Porta Contact us

Organization. This is best used when you know the exact site ID you are looking for.

**HUC:** Federal Code used to identify the hydrologic unit of the monitoring location to the cataloging unit level of precision. Use HUC8

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#### **Step 3 Define your parameters**

The Sampling Parameters section allows you to find water quality data of a certain type and/or within a specific date range.



**Sample Media:** indicates the environmental medium where a sample was taken (e.g. water, air, habitat, etc.)

Characteristic Group: refers to specific constituent groups (e.g. nutrients, sediment, etc.)
Characteristic: You can select data for a specific parameter of interest. (i.e. nitrogen)
Parameter Code: This is available for NWIS data only. This query allows users to search for specific water quality constituents by NWIS parameter codes.

**Date Range:** a user can define a date range to limit their data download by a time that is equal to their analysis range.

#### Optional Step-Show Sites on a Map

The Portal enables a quick view of your data query results to display the number of sites and records that met your query. The map display is an optional step to download data, although the visual display helps you to indicate if the query retrieved a useful number of records. The map also enables you to select a single station to identify the station owner and download the data from that individual station.

### Step 4 Select data source and download your data

As a cooperative service, the Portal enables you to seamlessly access data from STORET, NWIS and STEWARDS collectively or separately. If you are looking for all the data with the location and site information identified above, leave the *Select Database* field at the default All. Alternatively, you can select an individual database.

You are now ready to download your data. Select the data sites or results and the file format you want. To get both the site and result information, you will need to first select *Sites only* and select download and then select *Sample results only* and select download again to obtain both types of records. **Note**: The sites and results datasheets have a common data field *Monitoring Location ID* which can be used to join the two datasets.

You can download the *Sites* and *Sample results* data using the options listed under *File format*. The comma-separated, tab-separated and MS Excel 2007 can be opened directly into Excel. The KML format is a geospatial file available only for 'Sites'.

To return the same query in the future, select the *Show RESTlike queries* to obtain the URL to download the data again in the future. **Note**: future uses of the same query may

**Note**: future uses of the same query may yield somewhat different data, as new data are continually added and records updated in the databases which make up the Portal.

For more information, contact the Water Quality Portal team at <a href="mailto:wqp@usgs.gov">wqp@usgs.gov</a>



